the double cycles of coccidia and malarial parasites. The asexual and sexual forms are described in various stages. In a detailed paper, soon to appear (*Zentrabl. für Bakt.*), the technique will be fully described and microphotographs published.

The Treatment of Typhoid Bacillus Carriers.—LIEFMANN (*Münch. med. Woch.*, 1909, lvi, 509) discusses the problem of the disposal of chronic typhoid bacillus carriers who are themselves in good health, but a source of danger to others. It is important naturally to render them harmless to the community, and yet the many researches for this purpose have been without results. But it seemed to Liefmann that good results might be obtained with the Bulgarian sour milk, the so-called Goghurt, which is such a favorable medium for the growth of intestinal flora. He fed this to three bacillus carriers for a long period, taking care that the diet be not so rich in proteins as to interfere with a strong intestinal putrefaction. After seven weeks typhoid bacilli were found in the stools of one of the individuals, but never again since, although search was kept up diligently for a period of eleven weeks from the beginning of the treatment.

The Rare Forms of Cyanosis: Polycythemia, Methemoglobinemia, and Sulph-hemoglobinemia.—CLARKE (*Med. Record,* 1909, lxxvi, 143) describes the commoner forms of cyanosis due to imperfect aëration of the blood, as in heart disease, pneumonia, pleurisy, emphysema, and tuberculosis. Polycythemia is the form occurring in conjunction with a high red blood count. But the rarest of all forms is that produced by an alteration of the blood pigment itself. If this abnormal pigment is methemoglobin, the condition may be due to drug poisoning (acetanilide, phenacetin, sulphonal, trional), or auto-intoxication by the absorption of nitrites from the intestines in cases of chronic diarrhœa. If the pigment is sulph-hemoglobin, it is probably associated with chronic constipation, and is the result of the hyperformation or hyperabsorption of H_2S or the presence in the blood of an abnormal reducing agent acting with a small trace of H_2S. The methemoglobin cases improve as the enteritis is cured, and the sulph-hemoglobin cases recover if the bowels are kept open.

The Ipecac Treatment of Amœbic Dysentery.—DOCK (*New York Med. Jour.*, 1909, xc, 49) emphasizes the use of ipecac in chronic amœbic dysentery, in which he has had remarkably good results. From experiments, he suggests a direct destructive action of the drug. In addition there is a cholagogue and sometimes a purgative action. Clinically, in cases treated with ipecac a cessation of amœboid motion of the parasites occurs in a few hours. In one to three days they disappear completely. In the same time the stools lose their dysenteric character. Mucus and blood, later pus, disappear, and the stools resemble those of mild enteritis or even become formed. The effect upon the other protozoa in the stools varies. The patient should always be kept in bed. The ipecac is sometimes depressing. With the idea of getting the remedy into as close contact as possible with the parasites, there should be a preliminary pugation with salts. All food should be stopped while the ipecac is being taken, and only liquids used after it. The dose of ipecac varies with the severity of the case, from 30 to 60 grains being given at first, and then 20 to 40 grains twice a day, for three days. This is less troublesome and just as efficient as smaller doses at frequent intervals. Coating the pill with salol or keratin prevents solution in the stomach and attendant emetic action. Salivation is occasionally produced. Griping may follow, but is easily controlled with atropine.

Chronic Cholecystitis as a Cause of Myocardial Incompetence.—BABCOCK (*Jour. Amer. Med. Assoc.*, 1909, lii, 1904) reports 13 cases in which the effect of cholecystitis is seen in myocardial incompetency; 5 of these cases suffered with dilatation, arrhythmia, and feebleness of the heart's action plus murmurs: in short, subjective and objective symptoms of serious heart disease. Two cases had attacks of pain that had been called angina pectoris or were of an anginoid character. Evidences of myocardial inadequacy followed the attacks. A group of 3 cases had intermittence of the pulse of long standing and very intractable. Two cases of valvular disease suffered a decompensation due to outspoken attacks of hepatic colic. The explanation of the effect of the gall-bladder disease upon the heart is difficult. Several theories may be advanced: (1) The chronic myocarditis may be the result of the chronic gall-bladder infection—the circulation of bacteria and their toxins. The acute myocarditis due to an acute cholecystitis is well known. (2) The bile constituents have a depressing effect upon the myocardium. Stewart and King have proved that biliverdin is toxic to heart muscle and that bile salts increase the blood pressure. (3) Inasmuch as the splanchnics are the regulators of the circulation, their disturbance may prove an added factor by unfavorably affecting an already weakened heart and so leading to its dilatation and incompetence. (4) The disastrous effect of biliary colic upon the heart is probably a reflex result of stimulation of the filaments of the pneumogastric distributed to the wall of the gall-bladder. It is probable that there must be a predisposing cause residing in the heart muscle, a chronic myocarditis, in consequence of which the heart is unfavorably affected by influences which a healthy myocardium would be able to resist.

Meat as a Source of Infection in Tuberculosis.—LITTLEJOHN (*Practitioner*, 1909, lxxxii, 843) states that, to the community at large, the risk of contracting tuberculosis by eating the meat of tuberculous animals is not so great as generally believed. Imperfect inspection makes the risk greater than it should be, a risk which concerns especially those who buy cheap meat and eat such commonly infected organs as the lungs, udder, and mesenteries. The relative infrequency of tuberculosis in all but cattle and pigs makes them the only food animals at all dangerous to man. The flesh of tuberculous animals is not necessarily infectious, and when so, in many instances, it is due to secondary contamination by means of the knife, butcher's cloth, and dressing. Cooking is sufficient ordinarily to destroy tubercle bacilli on the outside of a roll or joint, but not in the centre. Finally, digestion, salting, or smoking have little or no disinfecting effect. However, the rarity of tuberculous foci in the flesh, even in advanced cases, makes ordinary cooking efficient if the thick rolls and joints are avoided and the meat is well done.